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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/574,686 | 04/05/2006 | Reinhold Schwalm | 287738US0PCT | 4204 |
| 22850 | 7590 | 01/22/2009 | | |
| OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | | |
| EXAMINER | | | | |
| GILLESPIE, BENJAMIN | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1796 | | | | |
| NOTIFICATION DATE | | DELIVERY MODE | | |
| 01/22/2009 | | ELECTRONIC | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/574,686

Applicant(s)

SCHWALM ET AL.

Examiner

BENJAMIN J. GILLESPIE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6 and 9-22 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-893)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date 4/5/2006

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what is intended by the phrase "A coated obtained", clarification is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1-6 and 9-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baccei ('526) in view of Schwalm et al ('459). Baccei teach UV curable coatings comprising a mixture of (A) urethane acrylate and (B) reactive diluents (Abstract; col 6 lines 3-5, 62-65). In

particular (A) is based on polytetrahydrofuran diol having a molecular weight of at least 500 g/mol (Col 2 lines 4-20; col 4 lines 9-26). Patentec goes on to teach that (B) consists of hydroxyl functional mono and bi-functional acrylates, however, Baccei fails to teach the claimed b) and c) components as well as their corresponding amounts.

4. Schwalm et al also teach UV curable coatings based on a mixture of (A) urethane acrylate (B) and reactive diluents (Abstract; col 6 lines 22-25). In particular, patentees explain that the reactive diluents consists of a compounds (Bi) such as 2-tetrahydropyranylmethyl acrylate, tetrahydrofurfuryl acrylate or 4-tetrahydropyranyl acrylate, and (Bii) such as ethylene glycol di(meth)acrylate, or propylene di(meth)acrylate (Col 2 lines 25-26; col 5 lines 13-67). These (Bi) and (Bii) compounds are preferred over the reactive diluents disclosed by Baccei since they "harmonize" better with component (A), and maintain superior mechanical properties without "the expense of other properties" (Col 1 line 43-50, 64-67; col 2 lines 1-2). Therefore it would have been obvious to replace the reactive diluents of Baccei for those of Schwalm et al since they are disclosed as being useful in an analogous composition, and one would be motivated to utilize the relied upon diluents since they provide a superior product.

5. Moreover, Schwalm et al teach (A), (Bi), and (Bii) are all present in amounts ranging from 30-80 wt%, 10-80 wt%, and 0-40 wt% respectively (Col 2 lines 41-51). Regarding the ranges of claim 4, the examiner would like to point out that components d), e), f), and g) may all be present by 0 wt% and therefore are considered optional. Patentees go on to teach that the coating composition may be applied to substrates such as wood, metal, paper, and plastic, wherein the said coating is applied in solution, the solvent is removed, and exposed to UV radiation or electron beams (Col 6 lines 57-67; col 7 lines 1-2).

6. With this understanding, the examiner also takes the position that it would have been obvious to arrive at the ranges of claim 3 since they are disclosed as being the suitable amounts of the relied upon components (Bi) and (Bii). Furthermore, it would have been obvious to apply the coating of Baccei using the method of Schwalm et al on the same substrates of Schwalm et al since they are taught as being suitable for an analogous composition and in obviousness rejections based on close similarity in chemical structure, the necessary motivation to make a claimed compound, and thus the prima facie case of obviousness, rises from the expectations that compounds similar in structure will have similar properties. *In re Gyurik* 596 F. 2d 1012, 201 USPQ 552 (CCPA 1979).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN J. GILLESPIE whose telephone number is (571)272-2472. The examiner can normally be reached on 8am-5:30pm.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rabon Sergent/

Primary Examiner, Art Unit 1796

B. Gillespie